12433556 MIDNITE MINE DRAINAGE NEAR WELLPINIT, WA

Spokane Basin
Lower Spokane Subbasin

LOCATION.--Lat 47°55'27", long 118°05'20" referenced to North American Datum of 1927, in NW ¼ SE ¼ sec.13, T.28 N., R.37 E., Stevens County, WA, Hydrologic Unit 17010307, Spokane Indian Reservation, on right bank, 2.4 mi downstream from Turtle Lake, and 0.1 mi upstream from confluence with Blue Creek, and 5.4 mi northwest of Wellpinit.

DRAINAGE AREA.--1.3 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1984 to October 1998, January 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,070 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. Three ponds upstream from gage exist for mine surface-water retention; June 1987, three diversions from the upstream channels were added to retain and treat contaminated water for mixing and later release. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--21 years (water years 1985-98, 2001-07), 0.38 ft^3/s, 275 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.9 ft^3/s, Mar. 19, 1997, gage height, 1.78 ft; no flow during part of water years 1986 to 1992, 2001, and 2004 to 2006.

REVISIONS.--Revised daily discharges and monthly mean for August and September 2006 and summary statistics for Water Year 2006, superseding those published in the WDR-US-06 report.

EXTREMES FOR CURRENT YEAR. --Maximum daily discharge, 1.2 ft^3/s, Apr12, maximum gage height, 1.57 ft, Aug. 9, 10; minimum daily discharge, 0.09 ft^3/s, Dec. 1-4 and Jan. 12-14.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.23	0.15	e0.09	e0.11	e0.10	e0.17	0.33	0.60	0.85	0.38	e0.80	e0.50
2	0.24	0.15	e0.09	e0.12	e0.10	e0.16	0.43	0.90	0.53	0.39	e1.0	e0.10
3	0.52	0.16	e0.09	e0.13	e0.10	e0.18	0.71	0.96	0.34	0.67	e0.72	e0.10
4	0.78	0.16	e0.09	e0.12	e0.10	e0.20	0.89	0.84	0.39	0.81	e0.40	e0.15
5	0.89	0.16	e0.10	e0.11	e0.11	e0.21	1.1	0.48	0.64	0.63	e0.20	e0.50
6	0.78	0.20	e0.10	e0.11	e0.12	e0.23	1.0	0.38	0.75	0.89	e0.30	e1.0
7	0.46	0.20	e0.10	e0.12	e0.11	0.22	0.68	0.56	0.99	0.69	e0.60	e1.1
8	0.27	0.15	e0.10	e0.11	e0.12	0.23	0.43	0.61	0.91	0.38	e0.80	e0.80
9	0.17	0.16	e0.10	e0.13	e0.12	0.24	0.44	0.89	0.55	0.57	e1.0	e0.10
10	0.25	0.18	e0.10	e0.12	e0.12	0.27	0.75	1.0	0.35	e0.90	e0.80	e0.20
11	0.46	0.17	e0.11	e0.10	e0.13	0.31	1.0	0.87	0.36	e1.0	e0.40	e0.73
12	0.69	0.15	e0.11	e0.09	e0.13	0.39	1.2	0.53	0.62	e0.90	e0.10	e1.0
13	0.69	0.20	e0.12	e0.09	e0.12	0.36	1.0	0.36	0.88	e0.80	e0.25	e1.1
14	0.39	0.17	e0.13	e0.09	e0.12	0.32	0.66	0.34	1.0	e0.60	e0.50	e1.0
15	0.27	0.15	e0.12	e0.10	e0.13	0.30	0.42	0.50	0.91	e0.34	e0.70	e0.50
16	0.41	0.15	e0.12	e0.10	e0.13	0.30	0.43	0.70	0.54	e0.40	e1.0	e0.10
17	0.49	0.13	e0.11	e0.10	e0.14	0.30	0.72	0.95	0.35	e0.60	e0.90	e0.20
18	0.72	0.13	e0.11	e0.10	e0.14	0.33	0.98	0.86	0.36	e0.80	e0.50	e0.50
19	0.80	0.15	e0.11	e0.10	e0.15	0.32	1.1	0.51	0.63	e1.0	e0.10	e0.88
20	0.70	0.17	e0.11	e0.10	e0.15	0.31	0.96	0.34	0.90	e0.95	e0.20	e1.0
21	0.44	0.16	e0.12	e0.10	e0.15	0.30	0.59	0.36	1.1	e0.75	e0.64	e0.90
22	0.27	0.17	e0.12	e0.11	e0.16	0.30	0.41	0.61	0.96	e0.32	e0.90	e0.60
23	0.25	0.18	e0.12	e0.12	e0.16	0.30	0.37	0.88	0.61	e0.38	e1.0	e0.20
24	0.46	0.16	e0.11	e0.11	e0.16	0.34	0.64	1.0	0.40	e0.70	e0.80	e0.32
25	0.68	0.15	e0.12	e0.11	e0.16	0.34	0.80	0.86	0.39	e0.90	e0.50	e0.60
26	0.76	0.16	e0.12	e0.11	e0.16	0.33	0.97	0.51	0.67	e1.0	e0.10	e0.90
27	0.64	0.16	e0.11	e0.10	e0.17	0.33	0.87	0.34	0.95	e0.95	e0.20	e1.0
28	0.38	e0.13	e0.11	e0.10	e0.18	0.31	0.52	0.26	1.1	e0.70	e0.60	e0.90
29	0.24	e0.11	e0.10	e0.10	---	0.30	0.36	0.32	0.96	e0.30	e0.80	e0.50
30	0.16	e0.10	e0.10	e0.10	---	0.31	0.34	0.58	0.61	e0.35	e0.95	e0.10
31	0.15	---	e0.10	e0.10	---	0.33	---	0.88	---	e0.50	e0.90	---
Total	14.64	4.72	3.34	3.31	3.74	8.84	21.10	19.78	20.60	20.55	18.66	17.58
Mean	0.47	0.16	0.11	0.11	0.13	0.29	0.70	0.64	0.69	0.66	0.60	0.59
Max	0.89	0.20	0.13	0.13	0.18	0.39	1.2	1.0	1.1	1.0	1.0	1.1
Min	0.15	0.10	0.09	0.09	0.10	0.16	0.33	0.26	0.34	0.30	0.10	0.10
Ac-ft	29	9.4	6.6	6.6	7.4	18	42	39	41	41	37	35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	0.37	0.31	0.15	0.19	0.23	0.49	0.55	0.57	0.52	0.44	0.40	0.38
Max	1.27	1.11	0.51	0.73	0.65	1.69	1.31	1.29	1.12	1.05	1.06	1.11
(WY)	(1997)	(1996)	(1996)	(1997)	(1997)	(1997)	(1995)	(1995)	(1996)	(1996)	(1996)	(1997)
Min	0.04	0.02	0.06	0.08	0.09	0.08	0.10	0.06	0.05	0.03	0.01	0.02
(WY)	(2006)	(2006)	(2004)	(1989)	(1993)	(2004)	(1992)	(1992)	(1992)	(1988)	(1992)	(2001)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1984 - 2007	
Annual total	179.86		156.86			
Annual mean	0.49		0.43		0.38	
Highest annual mean					1.00	1997
Lowest annual mean					0.08	1992
Highest daily mean	1.5	Jan 14	1.2	Apr 12	5.3	Mar 20, 1997
Lowest daily mean	0.09	Dec 1	0.09	Dec 1	0.00	Jun 22, 1986
Annual seven-day minimum	0.09	Nov 30	0.09	Nov 30	0.00	Aug 8, 1990
Annual runoff (ac-ft)	357		311		275	
10 percent exceeds	0.95		0.95		1.0	
50 percent exceeds	0.43		0.34		0.18	
90 percent exceeds	0.14		0.10		0.05	